Claims

1. A method for converting an input image having a first format to an output image having a second format, wherein the input image and the output image are each defined by a plurality of pixels, comprising:

5   receiving the input image;

converting each pixel of the input image to a corresponding pixel for an output image in accord with a map setting forth a predefined relationship between the first format and the second format, thereby creating the output image;

10   formatting the output image; and

displaying the formatted output image.

2. The method of claim 1, wherein the converting step includes creating the map as a matrix that sets forth predefined relationships between one type of format as an input image and another type of format as an output image.

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3. The method of claim 1, wherein the converting step comprises the sequential steps:

converting the color space of the input image;

20   scaling the input image;

creating additional views as needed;

swapping views;

preparing a presentation of the output image for a particular format type;

centering the presentation;

25   formatting the presentation thereby creating a formatted output image; and

displaying the formatted output image.

4. The method of claim 3, further comprising inverting the input image

30 after the scaling step and before the creating step.

5. The method of claim 3, further comprising aligning the views after the creating step and before the swapping step.

6. The method of claim 3, further comprising arranging a predefined view wherein a single frame contains nine views, then interzigging the views, after the swapping step and before the preparing step.

7. The method of claim 1, wherein the input image is a planar image, further comprising creating a stereo image pair from the planar image.

8. The method of claim 7, wherein the creating step comprises:
scaling the planar image by a fixed percentage to create a scaled image;
copying the scaled image to create a complimentary image;
shifting the complimentary image by a smaller percentage of the fixed percentage;
extracting a centered image from the scaled image; and
extracting a centered image from the shifted complimentary image.

10. The method of claim 9, wherein the smaller percentage is half.

11. The method of claim 7, wherein the creating step comprises:
scaling the planar image by a fixed percentage to create a scaled image;
copying the scaled image to create a complimentary image;
skewing the complimentary image by a smaller percentage of the fixed percentage;
extracting a centered image from the scaled image; and
extracting a centered image from the shifted complimentary image.

12. The method of claim 11, wherein the smaller percentage is half.

13. A device for converting an input image having a first format to an output image having a second format, wherein the input image and the output image are each defined by a plurality of pixels, comprising a software-enabled matrix that sets forth predefined relationships between one type of format as

5 an input image and another type of format as an output image, and a processor configured to identify the first format of the input image and convert it using the matrix to an output image having the second format.

14. A device according to claim 13, wherein the matrix contains for each

10 type of image format a pre-defined correspondence between a pixel from the input image and a pixel for the output image.